BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: IMPROVEMENTS OF PATHWAY AND GRILL FENCING TO RAJIV GANDHI PARK IN WARD NO-05.

BILL OF QUANTITIES

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
1	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete as per specifications and directions of the Engineer in charge.	Cum	664.88	204.60	Rupees Two Hundred Four and Sixty Paise Only
2	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete as per specifications and directions of the Engineer in charge.	Cum	47.8545	6109.4	Rupees Six Thousand One Hundred Nine and Forty Paise Only
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) complete as per specifications and directions of the Engineer in charge.	Cum	388.22	5887.20	Rupees Five Thousand Eight Hundred Eighty Seven and Twenty Paise Only
4	Providing Flush/ Ruled pointing: Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) after raking joints to depth nicely lining, including cost of materials, labour, curing , complete as per specifications and directions of the Engineer in charge.	Sqm	311.13	218.90	Rupees Two Hundred Eighteen and Ninety Paise Only
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) Mix 1:2:4 (M15) Using 20 mm nominal size graded crushed coarse aggregates .complete as per specifications and directions of the Engineer in charge.	Cum	207.19	6468.00	Rupees Six Thousand Four Hundred Sixty Eight Only

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
				In Figures	In Words
6	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates, complete as per specifications and directions of the Engineer in charge.	Cum	19.73	6564.80	Rupees Six Thousand Five Hundred Sixty Four and Eighty Paise Only
7	Fabricating, providing and erecting in position of MS. Hot dip galvanized Sq. Hallow Poles of 132*132 Heavy gauge of length 3000mm with MS. Hot dip galvanized grill work as per approved design and drawing of chief architect. Using 12*75mm galvanized flat for alround frame and 20mm 20mm galvanized- forged design with square for vertical at 150mm C/C as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flat, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading with cost and conveyance of all materials, labour, machinery and incidental charges for the successful complete as per specifications and directions of the Engineer in charge.	Sqm	622.26	15630.00	Rupees Fifteen Thousand Six Hundred Thirty Only
8	Fabricating, providing and erecting in position Hot dip galvanised Gate Using 72*72*4.8mm Sq. GI Pipe frame with top pipe bending in heavy duty hydraolic press with sand packing and hot bending to form double arch as per drawing profile,20mm hot dip galvanised sq.rod for verticals at 150mm c/c, as shown in the drawing including providing hot dip galvanised forged ornamental design in between sq.rods and heads at top,middle and bottom. Intermediate supports of 75*12mm and 50*6mm arch bent to hot dip galvanised flats the work is inclusive of throughing GI.flat GI sq.rods,placing, welding all the joints including grinding, finishing metal patty,painting wo coats enamel painting. The rate is inclusive of all materials like GI sq pipe,GI.Sq.rods,GI forged designs etc., heavy duty hinges are made out of 75mm solid sq.block assembled with 20mm dia bearing in the three places for each flop. Heavy duty locking arrangements at low places including cost of labou,pailnting, erecting charges using hoist pulley cranes with all lead and lift, loading,transportation,unloading,scaffolding charges and all other incidental charges for sucessful complete as per	Sqm	17.43	21350.00	Rupees Twenty One Thousand Three Hundred Fifty Only
9	Removing and Resetting of Cobble Stone (Data Rate) complete as per specifications and directions of the Engineer in charge.	Sqm	224.01	380.00	Rupees Three Hundred Eighty Only

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
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10	Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per m2 over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level , including cost of materials, labour and Usage charges of machinery complete as per specifications and directions of the Engineer in charge.	Sqm	902.44	1195.70	Rupees One Thousand One Hundred Ninety Five and Seventy Paise Only
11	Removing and Resetting of Kerb Stone (Data Rate) complete as per specifications and directions of the Engineer in charge.	m	215.28	118.00	Rupees One Hundred Eighteen Only
12	Providing and fixing pre cast solid cement concrete Kerb Stones made out of M20 with top and bottom width 114 and 165mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading, unloading, lead and lift transportion etc., complete as directed by the Engineer in charge of the work(from finish concrete and no painting to be done)(Data	Nos	1464.00	507.00	Rupees Five Hundred Seven Only
13	Painting Two Coats on New Concrete Surfaces Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concretesurfaces. complete as per specifications and directions of the Engineer in charge.	Sqm	305.87	93.50	Rupees Ninety Three and Fifty Paise Only
14	Providing and laying reinforced cement concrete pipe NP3 for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets Clause 1101.6. 1200mm dia ,complete as per specifications and directions of the Engineer in charge.	Cum	12.00	8977.10	Rupees Eight Thousand Nine Hundred Seventy Seven and Ten Paise Only
15	Providing and Filling in foundation with granite / trap broken metal 100mm and down size with approved M-Sand including hand packing, ramming, watering including cost of all materials and labour with all lead and lift complete as per specifications and directions of the Engineer in charge	Cum	2.39	1752.30	Rupees One Thousand Seven Hundred Fifty Two and Thirty Paise Only
16	Granular Aggregates, 53mm downsize, complete as per specifications and directions of the Engineer in charge.	Cum	2.39	1250.00	Rupees One Thousand Two Hundred Fifty Only
17	Granular Aggregates, 20mm downsize , complete as per specifications and directions of the Engineer in charge.	Cum	2.39	1350.00	Rupees One Thousand Three Hundred Fifty Only
18	Sand - M-Sand –Fine, complete as per specifications and directions of the Engineer in charge.	Cum	1.59	1488.00	Rupees One Thousand Four Hundred Eighty Eight Only
19	Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 5.5 m3) complete as per specifications and directions of the Engineer in charge.	Cum	664.88	129.80	Rupees One Hundred Twenty Nine and Eighty Paise Only

Item No	Description of Work	Unit	Total Quantity as per Estimation	Rate as per estimate in Rs.	
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20	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km – 100 t.km. complete as per specifications and directions of the Engineer in charge.	t.Km	851.05	105.60	Rupees One Hundred Five and Sixty Paise Only

Executive Engineer
BBMP

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